

[C A S E R E P O R T]

Presentation of Reticulate Acropigmentation of Kitamura and Dowling-Degos Disease Overlap

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ABSTRACT

The authors report a case of overlapping reticulate acropigmentation of Kitamura and Dowling-Degos disease seen in a 57-year-old woman. This is a unique presentation of two rare entities that some believe to be the same disease with variable phenotypic expression. This is an interesting case of reticulated pigmentation that unfortunately has limited treatment options. (*J Clin Aesthet Dermatol.* 2012;5(5):41–43.)

Reticulated hyperpigmentation is an uncommon entity and initial evaluation should exclude some common disorders before diagnosis. Independently, both reticulate acropigmentation of Kitamura and Dowling-Degos disease are rare genodermatoses. The authors describe an interesting patient with an overlap presentation of both disorders.

A 57-year-old Hispanic woman presented with a nearly 40-year history of multiple hyperpigmented macules on her hands, feet, trunk, axilla, and groin. The lesions initially appeared at age 20, first presenting over the dorsal aspect of her hands and feet. Over the years, the macules had progressed proximally. Her first truncal lesions appeared approximately seven years ago. Additional evolutionary features included an increase in size and in pigmentation. Of note, the lesions were pruritic when they initially erupted.

Her past medical history was significant for hypertension, benign liver cysts, and hidradenitis suppurativa. The patient was from Nicaragua and denied known Japanese or Asian ancestry. Her family history included similar hyperpigmented lesions in her paternal grandmother, father, and son. Her only reported medications were atenolol and petrolatum. Despite her aesthetic concerns, she had never received treatment for her hyperpigmented lesions. The patient was given a trial of azelaic acid with unknown response as she was subsequently lost to follow up.

On physical examination, the patient was a well-developed Hispanic woman with reticulate brown patches on the dorsal aspect of her hands and feet, back, chest, bilateral axilla, and groin (Figures 1 and 2). There were also multiple, diffuse brown stuck-on papules on her face, chest, neck, arms, and legs. In addition, there were palmar and plantar pits on her bilateral extremities (Figure 3). Biopsies were obtained from inframammary lesions and stained with hematoxylin and eosin (H&E). The histopathological features include a reticulated, lentiginous epidermis as well as basal hypermelanosis with papillomatosis and pseudohorn cysts (Figures 4 and 5). A clinicopathological diagnosis of reticulate acropigmentation of Kitamura and Dowling-Degos disease overlap was made.

DISCUSSION

Both reticulate acropigmentation of Kitamura and Dowling-Degos disease fall under the category of reticulated pigmentary disorders. As with other disorders of this class, a review of family history should be performed as these two conditions follow an autosomal dominant pattern of inheritance. There have been several published reports of patients exhibiting features consistent with both diseases, prompting the belief that this may be the same disease with variable phenotypic expression.

Reticulate acropigmentation of Kitamura is a rare genodermatosis first described by Kitamura and Akamatsu in Japan in 1943.¹ The majority of reported cases occur in

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Figure 1. Lesions on right axilla



Figure 2. Lesions on dorsum of left hand



Figure 3. Palmar pits on right hand

Japanese patients, but the condition has also been recognized worldwide. The usual age of onset is during childhood or in the first and second decades of life. The lesions initially arise as lentiginous, hyperpigmented macules in a reticular pattern on the dorsal aspect of the hands and feet. A characteristic feature of the early lesions is atrophy. Over time, lesions may spread proximally and may darken. Palmoplantar pitting and dermatoglyphic disruption may also be present.

Dowling Degos disease is another rare genodermatosis otherwise known as reticular pigmented anomaly of the flexures. Dowling in 1938² and Degos in 1954³ were the first to report this disorder. The onset of lesions is during adulthood in the third or fourth decades of life. The disease presents as reticular brown, black-pigmented hyperpigmentation in the flexural areas of the axillae, neck, inframammary, inguinal, and sternal areas. Pruritus is occasionally seen in these flexural regions. Facial pits and perioral scars may also be present. Associated conditions include hidradenitis suppurativa, squamous cell carcinoma, keratoacanthoma, and seborrheic keratosis.

The overlap between reticulate acropigmentation of Kitamura and Dowling Degos disease has been reported in the literature. The patient presented is unique such that she had hidradenitis suppurativa, a condition not previously encountered in reported cases of overlap. Controversy exists over whether reticulate acropigmentation of Kitamura, Dowling Degos disease, acropigmentation of Dohi, and Galli-Galli disease are variants of a single disease entity.^{4,5} It is often difficult to discriminate the distinct disorders. However, important negative features that exclude the diagnosis of acropigmentation of Dohi and Galli-Galli disease in the patient described in this case are absence of concomitant hypopigmented lesions and absence of suprabasal acantholysis on histology, respectively.⁶ Based on the locations of the hyperpigmented lesions, palmoplantar pitting, hidradenitis suppurativa, and histopathological findings, the diagnosis is more likely to be reticulate acropigmentation of Kitamura-Dowling Degos disease overlap.

Unfortunately, there are no effective treatment options for these conditions. Treatment with topical retinoids has been unsuccessful, and adapalene provides only temporary improvement.^{7,8} Azelaic acid, a tyrosinase inhibitor commonly used for acne, rosacea, and postinflammatory hyperpigmentation, has been shown to be a potential treatment option.⁹ Erbium-doped yttrium aluminium garnet (Er:YAG), an ablative laser that emits light at 2,940 nanometers for skin resurfacing and pigmentary disorders, is another therapeutic option.¹⁰

The authors present this interesting, overlapping case of two rare genodermatoses. When encountering reticulated hyperpigmentation disorders, it is important to recognize the distress they may impart on the patient. Unfortunately, these disorders are difficult to manage due to limited therapeutic options.

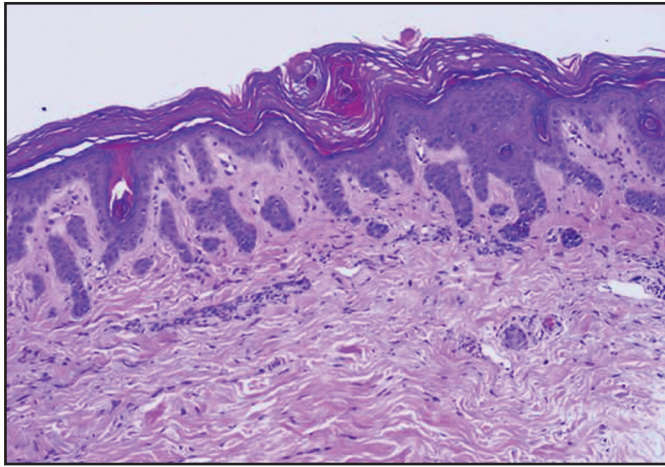


Figure 4. H&E of dorsal hand lesion at 2x

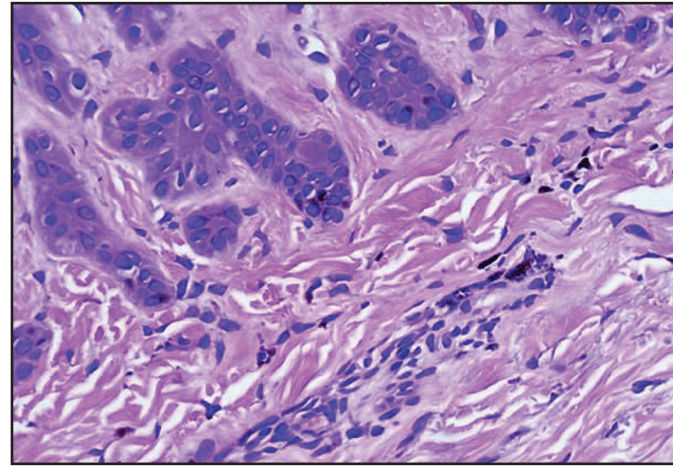


Figure 5. H&E of dorsal hand lesion at 10x

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